Trees In Trouble

Project Learning Tree Activity #77

Program of Studies

Science:

- S-P-SI-1 (ask simple scientific questions that can be answered through observations.)
- S-P-SI-3 (use evidence (e.g., observations) from simple scientific investigations and scientific knowledge to develop reasonable explanations.)
- S-P-SI-4 (Students will design and conduct different kinds of simple scientific investigations.)
- S-P-SI-5 (communicate (e.g., speak, draw) designs, procedures, and results of scientific investigations.)
- S-P-SI-6 (question scientific investigations and explanations of other students.)
- S-P-LS-1(Students will understand that organisms have basic needs (e.g., air, water, nutrients, light) and can only survive when these needs are met.)
- S-P-LS-5 (Students will understand that organisms have life cycles that are different for different organisms.)
- S-4-SI-1 (ask simple scientific questions that can be answered through observations combined with scientific information)
- S-4-SI-3 (use evidence (e.g., descriptions) from simple scientific investigations and scientific knowledge to develop reasonable explanations.)
- S-4-SI-4 (Students will design and conduct different kinds of simple scientific investigations.)
- S-4-SI-5 (communicate (e.g., graph, write) designs, procedures, and results of scientific investigations.)
- S-4-SI-6 (Students will review and ask questions about scientific investigations and explanations of other students.)
- S-4-LS-1 (Students will understand that organisms have basic needs (e.g., air, water, nutrients, light) and can only survive when these needs are met.)
- S-4-LS-2 (Students will understand that behavior of individual organisms is influenced by stimuli (e.g., touch, hunger).)
- S-4-LS-7 (Students will understand that organisms' patterns of behavior are related to the nature of organisms' environments. There are many different environments (e.g., deserts, rain forests) on Earth that support different types of organisms.)
- S-4-LS-9 (Students will understand that organisms change the environment. These changes may be detrimental or beneficial.)
- S-5-SI-1 (Students will identify questions that can be answered through scientific investigations combined with scientific information.)
- S-5-SI-3 (use evidence (e.g., classifications), logic, and scientific knowledge to develop scientific explanations.)
- S-5-SI-4 (Students will design and conduct different kinds of scientific investigations to answer different kinds of questions.)
- S-5-SI-5 (communicate (e.g., draw, speak) designs, procedures, and results of scientific investigations.)

- S-5-SI-6 (Students will review and analyze scientific investigations and explanations of other students.)
- S-6-SI-1 (identify and refine questions that can be answered through scientific investigations combined with scientific information.)
- S-6-SI-3 (use evidence (e.g., orderings, organizations), logic, and scientific knowledge to develop scientific explanations.)
- S-6-SI-4 (Students will design and conduct different kinds of scientific investigations to answer different kinds of questions.)
- S-6-SI-5 (communicate (e.g., speak, write) designs, procedures, and results of scientific investigations.)
- S-6-SI-6 (Students will review and analyze scientific investigations and explanations of other students.)
- S-6-LS-1 (Students will investigate how organisms obtain and use resources, grow, reproduce, and maintain stable internal conditions. Examine the regulation of an organism's internal environment.)
- S-6-LS-2 (Students will analyze internal or environmental stimuli and organisms' behavioral responses. Explore how organisms' behavior changes through adaptation.)
- S-6-LS-5 (Students will investigate factors (e.g., resources, light, water) that affect the number of organisms an ecosystem can support.)
- S-7-SI-1(Students will identify and refine questions that can be answered through scientific investigations combined with scientific information.)
- S-7-SI-3 (Students will use evidence (e.g., measurements), logic, and scientific knowledge to develop scientific explanations.)
- S-7-SI-4 (Students will design and conduct different kinds of scientific investigations to answer different kinds of questions.)
- S-7-SI-5 (Students will communicate (e.g., write) designs, procedures, and results of scientific investigations.)
- S-7-SI-6 (Students will review and analyze scientific investigations and explanations of other students.)
- S-7-LS-4 (Students will investigate biological adaptation and extinction.)
- S-8-SI-1 (identify and refine questions that can be answered through scientific investigations combined with scientific information.)
- S-8-SI-3 (use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations.)
- S-8-SI-4 (design and conduct different kinds of scientific investigations to answer different kinds of questions.)
- S-8-SI-5 (communicate (e.g., write, graph) designs, procedures, and results of scientific investigations.)
- S-8-SI-6 (Students will analyze diversity and adaptations (e.g., changes in structure, behaviors, or physiology.)
- S-8-LS-4 (Students will investigate and analyze populations and ecosystems.)

Social Studies:

- SS-4-G-4 (Students will understand how humans have interacted with the physical environment to meet their needs in Kentucky and regions in the United States.)
- SS-5-H-5 (Students will examine the historical contributions of individuals and groups.)

- SS-6-G-3 (Students will evaluate the impact of human settlement and the interaction of humans with their environments.)
- SS-8-H-4 (Students will examine the impact of significant individuals and groups in early United States history.)

Core Content

Science:

- SC-E-SI-1 (ask simple scientific questions that can be investigated through observations combined with scientific information)
- SC-E-SI-2 (use simple equipment (e.g., magnifiers, magnets), tools (e.g., metric rulers, thermometers), skills (e.g., classifying, predicting), technology (e.g., electronic media, calculators, World Wide Web), and mathematics in scientific investigations.)
- SC-E-SI-3 (use evidence (e.g., observations, data) from simple scientific investigations and scientific knowledge to develop reasonable explanations.)
- SC-E-SI-4 (design and conduct simple scientific investigations.)
- SC-E-SI-5 (communicate (e.g., draw, graph, write) designs, procedures, observations, and results of scientific investigations.)
- SC-E-SI-6 (review and ask questions about scientific investigations and explanations of other students)
- SC-E-3.1.2 (Organisms have basic needs. For example, animals need air, water, and food; plants need air, water, nutrients, and light. Organisms can survive only in environments in which their needs can be met.)
- SC-E-3.2.1(Plants and animals have life cycles that include the beginning of life, growth and development, reproduction, and death. The details of a life cycle are different for different organisms.)
- SC-E-3.3.2 (The world has many different environments. Distinct environments support the lives of different types of organisms. When the environment changes, some plants and animals survive and reproduce, and others die or move to new locations.)
- SC-E-3.3.3 (All organisms, including humans, cause changes in the environment where they live. Some of these changes are detrimental to the organism or to other organisms; other changes are beneficial (e.g., dams built by beavers benefit some aquatic organisms but are detrimental to others).)
- SC-M-SI-1 (refine and refocus questions that can be answered through scientific investigation combined with scientific information)
- SC-M-SI-2 (use appropriate equipment, tools, techniques, technology, and mathematics to gather, analyze, and interpret scientific data.)
- SC-M-SI-3 (use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations.)
- SC-M-SI-4 (design and conduct scientific investigations.)
- SC-M-SI-5 (communicate (e.g., write, graph) designs, procedures, observations, and results of scientific investigations.)
- SC-M-SI-6 (review and analyze scientific investigations and explanations of other students.)
- SC-M-3.1.1 (Living systems at all levels of organization demonstrate the complementary nature of structure and function. Important levels of organization for

structure and function include cells, tissues, organs, organ systems, organisms (e.g., bacteria, protists, fungi, plants, animals), and ecosystems.)

- SC-M-3.2.1 (All organisms must be able to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment.)

Social Studies:

- SS-E-3.1.1 (Scarcity requires people to make choices about using goods, services, and limited resources.)
- SS-M-3.1.1 (Productive resources (land, labor, capital) are limited and do not satisfy all the wants of individuals, societies, and governments (scarcity).)